

# australian commodities

march quarter 07.1

GPO Box 1563 Canberra 2601 ❖

Telephone +61 2 6272 2000 ❖

[abareconomics.com](http://abareconomics.com) ❖

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editor andrew wright ❖

ABARE project 1163 ❖

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ISSN 1321-7844

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> colin mues > +61 2 6272 2040 > cmues@abare.gov.au

## farm financial performance

### Australian farm income, debt and investment, 2004-05 to 2006-07

> peter martin, colin mues, paul phillips, walter shafron, thuy van mellor, phil kokic, rohan nelson and rhonda treadwell

- » **Severe drought across southern and central Australia is projected to reduce farm incomes in 2006-07 to their lowest level in over thirty years.**
- » **Farm cash incomes for grain farms in New South Wales, South Australia and Victoria are estimated to have fallen the most, and the dairy industry has also been particularly affected.**
- » **Most Australian farms entered 2006-07 with relatively high farm equity. However, a large increase in the proportion of farms recording negative farm cash incomes in 2006-07 is likely to result in significant increases in farm debt.**
- » **Continued strong prices for major commodities, particularly grains and beef, together with high levels of farm investment in recent years, remain positive factors supporting farm income recovery and farm values after 2006-07.**
- » **While financial performance is obviously important to farmers' ability to manage the impact of the current drought, human social and biophysical factors are also important contributors to the resilience of farm businesses.**

### farm income falls sharply

Data from ABARE's Australian agricultural and grazing industries survey and Australian dairy industry survey are used in this analysis to gain insights into the performance of Australian farms principally over the period since 2004-05, including projected farm financial performance in 2006-07.

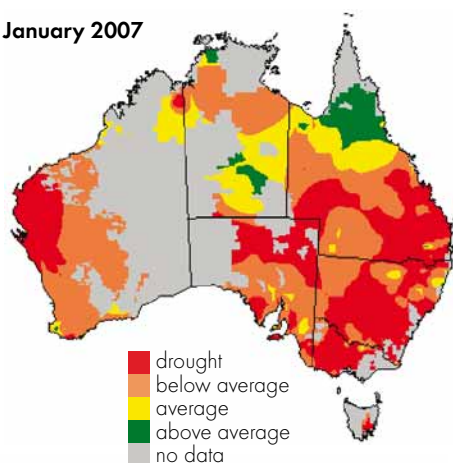
The financial performance of Australian farms improved in 2004-05 and 2005-06, following a sharp fall in the financial performance of Australian farms in 2002-03 that resulted from the onset of drought. Improved seasonal conditions in parts of Australia in 2004-05 and during the spring of 2005-06 underpinned an increase in farm incomes. However, the return of severe drought across most of southern Australia in 2006 has led to a significant reduction in farm production and incomes in 2006-07. In January 2007 around 60 per cent of Australian broadacre farmers reported the existence of drought conditions (map 1). This is similar to the proportion of producers who reported drought in October 2002.

Over the five years to 2005-06, when seasonal conditions were mixed but generally below average, prices for livestock and grains remained relatively high, assisting farmers to manage cash flow when production had fallen. In particular, high beef cattle prices

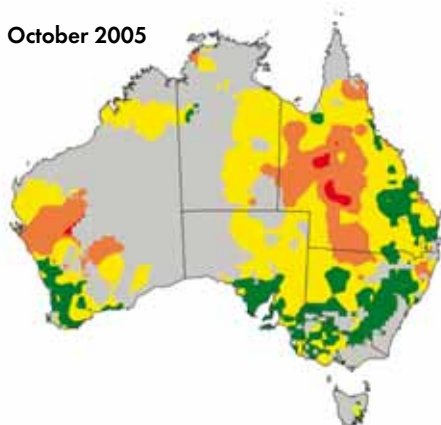
## farm performance

### seasonal conditions

January 2007



October 2005



were crucial in supporting farm incomes, as more Australian farms carry beef cattle than engage in any other farming enterprise.

Notwithstanding the mix of seasonal conditions in the five years to 2005-06, demand for rural land was strong which resulted in rising farm capital values. This served to offset the impact of recent increases in farm debt on farm equity levels. At the end of June 2006 the average equity ratio for Australian broadacre farms was 90 per cent, which is relatively high in historical terms. However, with farm debt projected to increase in 2006-07 and diminished prospects for further increases in land values, farmers will be more reliant on farm income and debt management to maintain farm equity in the medium term.

### financial performance of Australian farms

Each year ABARE interviews a large number of producers from the broadacre and dairy sectors of Australian agriculture as part of its annual broadacre and dairy surveys. The information collected provides a basis for analysing the current financial position of farmers in these industries and expected changes in the short term. Information for the preceding financial year is collected between July and October, usually by face to face interview. Estimates are also collected by telephone for the current financial year, usually in October and November.

However, in October and November 2006 there was more than usual uncertainty about production outcomes over the remainder of the financial year. Many producers were waiting to see how seasonal conditions unfolded over summer before making critical summer crop and livestock selling decisions. Consequently, ABARE recontacted farmers in January 2007 to update production and financial estimates for the current financial year.

### farm receipts

Overall, average total cash receipts for broadacre farms are projected to fall by nearly 20 per cent in 2006-07, with the bulk of this reduction being driven by reduced crop receipts (table 1). There were severe rainfall deficiencies over most winter cropping regions of Australia during 2006, particularly in late winter and spring. The effect of low rainfall over this period was also exacerbated by record high temperatures. Reflecting the extreme conditions, winter grains production in 2006-07 was around 60 per cent lower than the previous year, making it the lowest winter crop production in over ten years. Winter crop production is reported to have been sharply reduced in all areas except Western Australia, northern New South Wales and central Queensland where seasonal conditions were relatively more favourable. In addition, prospects for 2006-07 summer crops remain

below average, despite some rains in early 2007. Extremely dry conditions in northern New South Wales and southern Queensland during the early planting period in late 2006 are expected to limit potential summer crop production.

The reduction in crop production will be partially offset by higher crop prices. Prices received by farmers for all major grains and oilseeds are forecast to be 20–30 per cent higher in 2006-07 compared with 2005-06 because of reduced world grain production and stocks, coupled with increased domestic feedgrain demand for livestock feeding. Crop receipts will also be supported by payments from the large 2005-06 crop that will be received in the 2006-07 financial year. Despite these factors, average crop receipts are projected to fall by nearly 40 per cent for broadacre farms in 2006-07.

Farm receipts from sheep and lamb sales are also projected to fall in 2006-07. Lower saleyard prices for sheep and lambs, reflecting an increase in the number of stock sold and the sale of unfinished stock are projected to more than offset the effect on revenue of an increase in the number of sheep sold, particularly in South Australia and Victoria. The latest survey data indicate that wool production per farm will fall by around 9 per cent in 2006-07, primarily through a reduction in the number of sheep shorn. However, the impact of reduced wool production on farm receipts is projected to be partially offset by the recent recovery in the wool market and sale of some wool from on-farm stocks.

With low pasture availability and high feed prices, producers in southern Australia intend to increase the number of beef cattle sold and reduce herd numbers. Higher yardings, together with the sale of less finished stock, are forecast to result in average prices received for beef cattle being lower than in the previous year despite continued strength in the Australian beef market. Receipts from beef cattle sales are projected to

## 1 financial performance – all broadacre industries

average per farm

		2004-05	2005-06 <sup>p</sup>	2006-07 <sup>s</sup>
total cash receipts	\$	381 695	359 000 (6)	288 900
total cash costs	\$	308 911	277 710 (5)	262 300
<b>farm cash income</b>	\$	72 785	81 290 (11)	26 600
farms with negative farm cash income	%	28	23 (8)	44
<b>farm business profit</b>	\$	3 693	8 620 (96)	-59 800
farms with negative farm business profit	%	61	58 (3)	77
profit at full equity				
- excl. capital appreciation	\$	32 351	41 540 (21)	-22 200
- incl. capital appreciation	\$	225 373	233 070 (15)	na
farm capital at 30 June <sup>a</sup>	\$	3 131 247	3 426 030 (4)	na
net capital additions	\$	47 191	28 400 (78)	na
farm debt at 30 June <sup>b</sup>	\$	322 640	357 380 (6)	412 700
equity at 30 June <sup>b c</sup>	\$	2 691 881	3 054 370 (5)	na
equity ratio <sup>b d</sup>	%	89	90 (1)	na
harvest loans at 30 June <sup>e</sup>	\$	10 740	11 730 (13)	na
farm liquid assets at 30 June <sup>b</sup>	\$	121 965	134 840 (15)	na
farm management deposits (FMDs) at 30 June <sup>b</sup>	\$	26 990	21 180 (9)	na
share of farms with FMDs at 30 June <sup>b</sup>	%	24	19 (7)	na
rate of return <sup>f</sup>				
- excl. capital appreciation	%	1.1	1.3 (19)	-0.6
- incl. capital appreciation	%	7.8	7.3 (13)	na
off-farm income of owner manager and spouse <sup>b</sup>	\$	27 588	31 200 (6)	na

<sup>a</sup> Excludes leased plant and equipment. <sup>b</sup> Average per responding farm. <sup>c</sup> Farm capital minus farm debt. <sup>d</sup> Equity expressed as a percentage of farm capital. <sup>e</sup> Harvest loans are not included in farm debt. <sup>f</sup> Rate of return to farm capital at 1 July. <sup>p</sup> Preliminary estimates. <sup>s</sup> Provisional estimates. **na** Not available.

## farm performance

fall for producers in southern Australia, with lower saleyard prices more than offsetting the increase in the number of beef cattle sold. In contrast, beef producers in northern Australia are enjoying average or above average seasonal conditions. These producers are attempting to increase herd numbers, which serves to subdue beef receipts in the short term, although incomes are likely to improve in the medium term once turnoff increases.

Milk production will be reduced in 2006-07 as a consequence of drought across most dairying regions. Drought and lower availability of irrigation water have resulted in reduced pasture growth and have driven fodder costs higher. This has led many dairy farms to dry off cows early and reduce herd numbers in anticipation of continued drought conditions. As a consequence, average milk production per farm is forecast to fall by around 10 per cent in 2006-07. Early in 2006-07, world prices for dairy products were lower than the previous year although they have recently exhibited some signs of recovery. Average Australian farmgate milk prices are forecast to fall slightly in 2006-07 although this is not uniform across all states. Overall, milk receipts are forecast to fall sharply in 2006-07, mainly as a result of the drop in production.

### farm costs

Average cash costs for broadacre farms fell by around 8 per cent in 2005-06 (table 1), largely owing to a significant reduction in livestock purchases that more than offset the higher costs associated with the production, harvest and sale of the large winter crop, and higher interest payments. The latter was mainly the result of an increase in average farm debt as expenditure on capital items continued at historically high levels. In contrast, cash costs for dairy farmers rose by around 20 per cent, mainly from higher labour costs, fodder cost and interest payments.

#### major financial performance indicators

**farm cash income = total cash receipts - total cash costs**

*Total revenues received  
by the farm business  
during the financial year*

*Payments made by the farm business for  
materials and services and for permanent  
and casual hired labour (excluding owner  
manager, partner and family labour)*

**farm business profit = farm cash income + changes in trading stock - depreciation - imputed labour costs**

**profit at full equity = farm business profit + rent + interest and finance lease payments - depreciation on leased items**  
*(Return produced by all the resources used in the farm business)*

**rate of return = profit at full equity ÷ total opening capital x 100**

*(Return to all capital used)*

**off-farm income = wages off-farm + other business income + investment + social welfare payments**  
*(Owner manager and spouse only)*

In 2006-07, total farm cash costs for broadacre farms are projected to fall by a further 5 per cent as farmers trim costs in the face of reduced income. Significant reductions are expected in the cost of livestock purchases, repairs and maintenance and crop harvesting and marketing costs. However, these reductions are largely offset by higher fodder costs and increased interest payments associated with the expected increase in average farm debt. Another factor that will constrain the extent to which broadacre farmers can reduce costs in 2006-07 is the expected cost of planting the 2007 winter crops. Broadacre producers currently indicate that given a return to more normal seasonal conditions in autumn 2007 they intend to plant an expanded area to winter crops this year and most of the planting costs for this crop will be incurred in this financial year.

The expected increase in cash costs on Australian dairy farms in 2006-07 is almost entirely the result of higher fodder costs. Very dry seasonal conditions have significantly reduced pasture availability in most dairying regions and in order to secure fodder supplies producers have had to pay significantly higher prices than in previous years. Fodder costs aside, other cash costs for dairy farms are projected to fall slightly as producers attempt to mitigate the effect of lower receipts and high fodder costs on their financial performance.

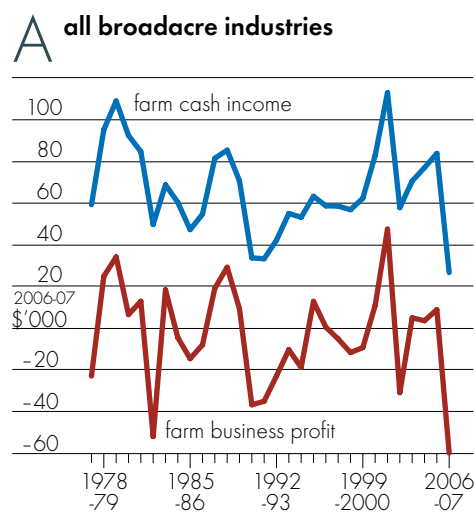
### farm cash income and farm business profit

In 2003-04 and 2004-05, farm cash income for the broadacre industries as a group improved steadily as production on these farms recovered from the 2002-03 drought. High livestock and crop prices over this period also helped the recovery. In 2005-06, crop production improved significantly and expenditure on livestock purchases and feed fell, resulting in a further modest increase in farm cash income (figure A).

In historical terms farm financial performance in 2006-07 is projected to be one of the poorest on record. A very large reduction in total cash receipts per farm, coupled with a relatively small reduction in total cash costs, is projected to result in a fall in farm cash income for broadacre industries of nearly two-thirds. Farm cash income for broadacre farms is projected to fall from an average of around \$81 000 per farm in 2005-06 to less than \$27 000 in 2006-07 – the largest year on year fall in farm cash income recorded in the 29 years during which the current series of ABARE surveys have been conducted (figure A).

Farm cash income is a measure of the cash funds available for farm investment and consumption after paying all costs incurred in production, including interest payments, but excluding capital payments and payments to family workers. It is a short term measure of farm performance because it takes no account of depreciation or changes in farm inventories. A longer term measure of profitability that takes account of capital depreciation and changes in inventories of livestock, fodder, grain and wool is farm business profit.

Average business profit for farms in the broadacre industries is expected to fall in 2006-07 by an even larger amount than the reduction in farm cash income (table 1, figure A). This reflects a projected rundown in inventories of livestock and grains on many farms, particularly those in cropping regions of southern Australia. Reduced livestock numbers will subdue farms' ability to generate cash flow beyond 2006-07. However, an exception to this pattern is in the northern



## farm performance

### estimated value of agricultural operations

ABARE's annual broadacre and dairy industry surveys only include farms above a minimum size threshold to exclude noncommercial businesses. This size threshold is based on the estimated value of agricultural operations (EVAO) as calculated by the Australian Bureau of Statistics.

ABARE has periodically changed the EVAO cutoff over the life of the two surveys. For the 2005-06 collection, ABARE raised the EVAO cutoff from \$22 500 to \$40 000. Estimates for 2004-05 have also been made using the same cutoff in real terms. Prior to this change, the last time the EVAO cutoff was changed was for the collection of data for 1991-92 when it was lifted from \$20 000 to \$22 500. It was kept at that level in nominal terms until the most recent collection.

### broadacre industries

#### wheat and other crops industry

The wheat and other crops industry represents the more specialised producers of cereal grains, coarse grains, pulses and oilseeds.

#### mixed livestock-crops industry

The mixed livestock-crops industry covers farms engaged in the production of sheep and/or beef cattle in conjunction with substantial activity in broadacre crops such as wheat, coarse grains, oilseeds and pulses.

#### sheep industry

The sheep industry represents the more specialised producers of sheep and wool. However, the number of properties classified to the industry, along with the industry's contribution to wool production, has declined substantially since the early 1990s as producers diversified enterprises. Currently, sheep industry farms account for only around a third of Australia's wool production. The majority of both wool and sheep meat production occurs on mixed enterprise farms, particularly on mixed livestock-crops industry farms.

#### sheep-beef industry

The sheep-beef industry covers properties engaged in running sheep and beef cattle. As for the sheep and beef industries, this industry also contains a large number of small farms.

#### beef industry

The beef industry covers properties engaged mainly in running beef cattle and accounts for around 60 per cent of Australia's beef production. The beef industry contains a large number of small farms.

regions of Australia where many properties are taking advantage of improved seasonal conditions by beginning to rebuild cattle numbers. In Queensland, for example, the reduction in average income for broadacre farms reflects a mixture of factors, such as reduced crop receipts, fewer livestock sales as producers begin to build up cattle herd numbers, and lower beef cattle prices. However, farm business profit is not expected to fall by as much as farm cash income due to a build up in livestock inventories.

### rates of return

Rates of return to total farm capital including capital appreciation have been relatively high in 2003-04, 2004-05 and 2005-06 (table 1). Strong demand for rural land in the past three years has resulted in sharply increased land values in many farming regions, raising the total capital value of farms. Rising farm capital values in recent years have resulted in historically high rates of return including capital appreciation, but have reduced rates of return excluding capital appreciation. Rates of return excluding capital appreciation have also been subdued in many areas by poor farm business profits resulting from below average seasonal conditions. With very low farm business profit projected for 2006-07, rates of return excluding capital appreciation are expected to also be among the lowest on record.

### performance, by state

The producer rating of seasonal conditions in January 2007 (map 1) is mirrored in the projected financial performance of broadacre farms across Australian states (table 2). Average farm cash income is projected to be very close to zero in New South Wales and Victoria in 2006-07, and positive but much lower than in the previous year in Queensland, Tasmania and South Australia. These poor results

## 2 financial performance, by state – all broadacre industries

average per farm

	New South Wales			Victoria		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 303 190	323 804 (11)	227 010	436 320	265 930 (10)	187 145
total cash costs	\$ 230 790	247 805 (9)	222 556	374 471	203 394 (11)	187 124
<b>farm cash income</b>	\$ 72 400	75 999 (23)	4 454	61 849	62 536 (12)	21
farms with negative farm cash income	% 30	22 (15)	55	26	18 (20)	45
<b>farm business profit</b>	\$ 3 114	11 176 (119)	-85 648	3 369	4 277 (143)	-73 287
farms with negative farm business profit	% 65	62 (5)	83	56	53 (9)	84
profit at full equity						
- excl. capital appreciation	\$ 28 645	37 616 (38)	-56 848	24 157	29 586 (21)	-42 265
- incl. capital appreciation	\$ 170 210	147 812 (38)	na	225 026	115 002 (20)	na
farm capital at 30 June <b>a</b>	\$ 2 809 653	2 922 354 (10)	na	2 601 239	2 765 766 (5)	na
net capital additions	\$ 39 366	26 970 (180)	na	39 048	24 062 (103)	na
farm debt at 30 June <b>b</b>	\$ 279 799	289 887 (9)	328 468	198 296	226 496 (9)	293 006
equity at 30 June <b>b c</b>	\$ 2 438 418	2 620 848 (11)	na	2 374 246	2 526 443 (6)	na
equity ratio <b>b d</b>	% 89.7	90.0 (1)	na	92.3	91.8 (1)	na
harvest loans at 30 June <b>e</b>	\$ 3 312	3 135 (29)	na	2 557	4 479 (36)	na
farm liquid assets at 30 June <b>b</b>	\$ 110 597	163 422 (34)	na	118 471	74 285 (14)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 16 441	15 490 (19)	na	23 731	20 320 (21)	na
share of farms with FMDs at 30 June <b>b</b>	% 19	17 (16)	na	25	22 (16)	na
rate of return <b>f</b>						
- excl. capital appreciation	% 1.1	1.4 (31)	-1.9	1.0	1.1 (21)	-1.5
- incl. capital appreciation	% 6.5	5.3 (29)	na	9.5	4.3 (20)	na
off-farm income of owner manager and spouse <b>b</b>	\$ 28 425	33 465 (19)	na	28 233	30 719 (21)	na
	Queensland			Western Australia		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 355 521	400 941 (27)	324 254	541 212	526 863 (6)	566 009
total cash costs	\$ 301 121	299 414 (22)	303 153	430 061	434 452 (7)	442 549
<b>farm cash income</b>	\$ 54 400	101 527 (47)	21 101	111 151	92 411 (16)	123 460
farms with negative farm cash income	% 32	27 (12)	42	25	28 (21)	28
<b>farm business profit</b>	\$ -2 925	1 312 (3640)	-50 279	26 285	3 099 (520)	-298
farms with negative farm business profit	% 66	63 (7)	71	51	55 (12)	60
profit at full equity						
- excl. capital appreciation	\$ 31 587	43 182 (119)	1 161	74 475	57 978 (26)	59 701
- incl. capital appreciation	\$ 293 688	393 249 (41)	na	351 820	550 989 (27)	na
farm capital at 30 June <b>a</b>	\$ 3 867 884	4 363 102 (16)	na	3 819 184	4 615 653 (8)	na
net capital additions	\$ 94 811	5 747 (1064)	na	27 244	32 791 (109)	na
farm debt at 30 June <b>b</b>	\$ 440 595	500 486 (17)	606 978	516 144	616 797 (12)	682 339
equity at 30 June <b>b c</b>	\$ 3 214 019	3 844 665 (17)	na	3 132 769	3 972 338 (8)	na
equity ratio <b>b d</b>	% 87.9	88.5 (2)	na	85.9	86.6 (2)	na
harvest loans at 30 June <b>e</b>	\$ 1 901	1 085 (67)	na	61 034	64 769 (15)	na
farm liquid assets at 30 June <b>b</b>	\$ 102 303	93 573 (18)	na	183 076	215 471 (16)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 32 953	21 615 (17)	na	37 368	27 584 (22)	na
share of farms with FMDs at 30 June <b>b</b>	% 23	18 (15)	na	31	19 (20)	na
rate of return <b>f</b>						
- excl. capital appreciation	% 0.9	1.1 (105)	0.0	2.1	1.4 (26)	1.3
- incl. capital appreciation	% 8.3	9.8 (28)	na	10.0	13.5 (26)	na
off-farm income of owner manager and spouse <b>b</b>	\$ 31 503	28 601 (19)	na	29 026	29 830 (21)	na

## farm performance

### 2 financial performance, by state – all broadacre industries average per farm

	South Australia			Tasmania		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 352 151	372 365 (10)	295 013	326 999	282 864 (14)	190 793
total cash costs	\$ 270 983	292 084 (11)	252 869	238 292	209 849 (11)	164 628
<b>farm cash income</b>	\$ 81 169	80 281 (13)	42 145	88 707	73 015 (25)	26 166
farms with negative farm cash income	% 24	21 (22)	36	11	23 (29)	40
<b>farm business profit</b>	\$ -15 102	13 584 (77)	-50 851	14 878	24 653 (22)	-44 234
farms with negative farm business profit	% 62	53 (10)	74	51	48 (24)	82
profit at full equity						
- excl. capital appreciation	\$ 8 334	42 713 (23)	-19 069	33 722	48 742 (19)	-24 264
- incl. capital appreciation	\$ 122 174	103 019 (27)	na	357 521	157 393 (27)	na
farm capital at 1 July <b>a</b>	\$ 3 024 063	3 217 247 (6)	na	3 024 380	3 237 904 (12)	na
net capital additions	\$ 39 036	77 873 (85)	na	10 342	-27 396 (96)	na
farm debt at 30 June <b>b</b>	\$ 291 926	309 364 (11)	328 354	216 771	276 334 (27)	332 046
equity at 30 June <b>b c</b>	\$ 2 647 239	2 900 361 (6)	na	2 629 361	2 958 026 (13)	na
equity ratio <b>b d</b>	% 90.1	90.4 (1)	na	92.4	91.5 (1)	na
harvest loans at 30 June <b>e</b>	\$ 7 802	10 883 (25)	na	0	0 (0)	na
farm liquid assets at 30 June <b>b</b>	\$ 119 842	142 318 (11)	na	201 771	133 430 (38)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 42 841	30 697 (18)	na	28 219	21 267 (56)	na
share of farms with FMDs at 30 June <b>b</b>	% 35	24 (17)	na	24	18 (43)	na
rate of return <b>f</b>						
- excl. capital appreciation	% 0.3	1.4 (21)	-0.6	1.2	1.6 (15)	-0.8
- incl. capital appreciation	% 4.2	3.4 (26)	na	13.2	5.0 (25)	na
off-farm income of owner manager and spouse <b>b</b>	\$ 17 800	30 951 (19)	na	34 338	32 648 (21)	na
	Northern Territory			Australia		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 1 427 516	1 479 737 (10)	1 234 701	381 873	358 998 (10)	288 905
total cash costs	\$ 1 541 574	1 004 533 (11)	1 179 154	309 256	277 712 (11)	262 271
<b>farm cash income</b>	\$ -114 058	475 204 (13)	55 547	72 616	81 286 (13)	26 634
farms with negative farm cash income	% 42	36 (22)	46	28	23 (22)	44
<b>farm business profit</b>	\$ 165 470	405 446 (77)	271 894	3 487	8 621 (77)	-59 787
farms with negative farm business profit	% 44	45 (10)	34	61	58 (10)	77
profit at full equity						
- excl. capital appreciation	\$ 213 384	473 065 (23)	344 384	32 119	41 538 (23)	-22 228
- incl. capital appreciation	\$ 769 578	1 338 705 (27)	na	226 603	233 068 (27)	na
farm capital at 30 June <b>a</b>	\$ 11 072 026	12 160 092 (6)	na	3 134 689	3 426 025 (6)	na
net capital additions	\$ 33 391	-29 502 (85)	na	47 001	28 396 (85)	na
farm debt at 30 June <b>b</b>	\$ 560 037	560 883 (11)	732 801	321 997	357 382 (11)	412 685
equity at 30 June <b>b c</b>	\$ 7 477 625	11 572 709 (6)	na	2 696 590	3 054 371 (6)	na
equity ratio <b>b d</b>	% 93	95 (1)	na	89	90 (1)	na
harvest loans at 30 June <b>e</b>	\$ 0	0 (25)	na	10 706	11 728 (25)	na
farm liquid assets at 30 June <b>b</b>	\$ 185 635	145 991 (11)	na	122 194	134 837 (11)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 18 039	28 082 (18)	na	26 901	21 178 (18)	na
share of farms with FMDs at 30 June <b>b</b>	% 15	13 (17)	na	24	19 (17)	na
rate of return <b>f</b>						
- excl. capital appreciation	% 2.1	4.2 (21)	2.9	1.1	1.3 (21)	-0.6
- incl. capital appreciation	% 7.6	11.9 (26)	na	7.8	7.3 (26)	na
off-farm income of owner manager and spouse <b>b</b>	\$ 14 924	27 059 (19)	na	14 924	31 199 (21)	na

**a** Excludes leased plant and equipment. **b** Average per responding farm. **c** Farm capital minus farm debt. **d** Equity expressed as a percentage of farm capital. **e** Harvest loans are not included in farm debt. **f** Rate of return to farm capital at 1 July. **p** Preliminary estimates. **s** Provisional estimates. **na** Not available.

### 3 financial performance, by state – dairy industry

average per farm

	New South Wales			Victoria		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 342 307	473 920 (4)	422 000	358 028	399 860 (5)	349 500
total cash costs	\$ 282 650	403 900 (6)	419 700	267 719	307 980 (6)	340 600
<b>farm cash income</b>	\$ 59 658	70 020 (22)	2 300	90 308	91 880 (12)	8 800
farms with negative farm cash income	% 13	20 (28)	48	3	13 (32)	54
<b>farm business profit</b>	\$ 729	-140 (11078)	-103 000	29 306	25 170 (41)	-86 100
farms with negative farm business profit	% 62	61 (9)	75	36	47 (18)	84
profit at full equity						
– excl. capital appreciation	\$ 23 872	38 100 (40)	- 67 900	65 134	67 710 (17)	-43 000
– incl. capital appreciation	\$ 231 888	106 720 (78)	na	146 691	111 340 (77)	na
farm capital at 30 June <b>a</b>	\$ 2 905 215	3 758 600 (11)	na	2 105 608	2 495 830 (5)	na
net capital additions	\$ 40 826	45 130 (57)	na	32 070	47 320 (41)	na
farm debt at 30 June <b>b</b>	\$ 232 960	384 000 (15)	427 300	346 271	430 910 (12)	478 700
equity at 30 June <b>b c</b>	\$ 2 719 719	3 359 420 (12)	na	1 699 122	2 057 710 (6)	na
equity ratio <b>b d</b>	% 92	90 (2)	na	83	83 (2)	na
farm liquid assets at 30 June <b>b</b>	\$ 72 659	122 530 (17)	na	91 351	71 780 (23)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 13 621	18 350 (38)	na	9 535	10 530 (28)	na
share of farms with FMDs at 30 June <b>b</b>	% 11	14 (33)	na	20	14 (31)	na
annual payment from DSAP and SDAS <b>f</b>	\$ 22 986	21 377 (33)	na	11 266	12 393 (31)	na
rate of return <b>g</b>						
– excl. capital appreciation	% 0.9	1.0 (43)	-1.8	3.3	2.8 (17)	-1.7
– incl. capital appreciation	% 8.8	2.9 (83)	na	7.4	4.7 (80)	na
off-farm income of owner-manager and spouse <b>b</b>	\$ 18 118	25 350 (38)	na	24 660	22 100 (28)	na
	Queensland			Western Australia		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 255 154	335 630 (5)	342 600	432 692	521 610 (5)	492 300
total cash costs	\$ 195 358	267 520 (7)	296 000	360 040	407 900 (6)	397 200
<b>farm cash income</b>	\$ 59 797	68 110 (20)	46 600	72 652	113 710 (13)	95 100
farms with negative farm cash income	% 12	18 (53)	21	11	12 (43)	25
<b>farm business profit</b>	\$ -2 880	15 850 (86)	-55 500	1 532	51 550 (31)	5 800
farms with negative farm business profit	% 54	37 (30)	80	58	25 (43)	46
profit at full equity						
– excl. capital appreciation	\$ 15 500	40 760 (32)	-20 700	42 626	103 830 (15)	64 100
– incl. capital appreciation	\$ 233 188	156 370 (47)	na	306 633	1 474 420 (18)	na
farm capital at 30 June <b>a</b>	\$ 2 206 962	2 643 650 (9)	na	3 859 782	6 504 780 (7)	na
net capital additions	\$ 3 191	41 340 (72)	na	-29 752	59 250 (35)	na
farm debt at 30 June <b>b</b>	\$ 231 739	370 620 (18)	344 000	478 006	593 410 (10)	688 200
equity at 30 June <b>b c</b>	\$ 2 004 486	2 261 430 (11)	na	3 348 700	5 900 490 (8)	na
equity ratio <b>b d</b>	% 90	86 (4)	na	88	91 (11)	na
farm liquid assets at 30 June <b>b</b>	\$ 54 648	71 830 (30)	na	47 602	129 340 (39)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 11 710	11 780 (62)	na	14 242	24 650 (65)	na
share of farms with FMDs at 30 June <b>b</b>	% 12	12 (52)	na	11	14 (55)	na
annual payment from DSAP and SDAS <b>f</b>	\$ 22 880	24 253 (52)	na	32 721	31 412 (55)	na
rate of return <b>g</b>						
– excl. capital appreciation	% 0.8	1.7 (30)	-0.7	1.2	2.1 (16)	1.0
– incl. capital appreciation	% 11.8	6.4 (46)	na	8.5	29.1 (23)	na
off-farm income of owner-manager and spouse <b>b</b>	\$ 23 945	23 770 (38)	na	14 218	13 730 (28)	na



reflect the combined impact of widespread crop failures that have drastically reduced total crop receipts and lower prices for beef cattle and sheep.

Farm cash income is also projected to be sharply lower in the Northern Territory, primarily reflecting increases in transfers onto Northern Territory properties compared with the previous year, while transfers off and sales remained relatively unchanged.

Average incomes in Western Australia are projected to increase in 2006-07 to just over \$120 000 per farm. Western Australian winter crop production in 2006 was less affected by below average seasonal conditions, although this was not uniform across the state. Grain producers in the northern parts of the cropping zone were particularly affected by the dry season and are expected to record poorer farm performance than their counterparts elsewhere in the state.

However, at the state level, carryover payments from the previous year's winter crop helped maintain crop receipts. The major factor behind the rise in farm cash income was a lift in receipts from cattle sales. However, higher cattle sales led to a reduction in herd numbers which, in turn, is reflected in the drop in farm business profit.

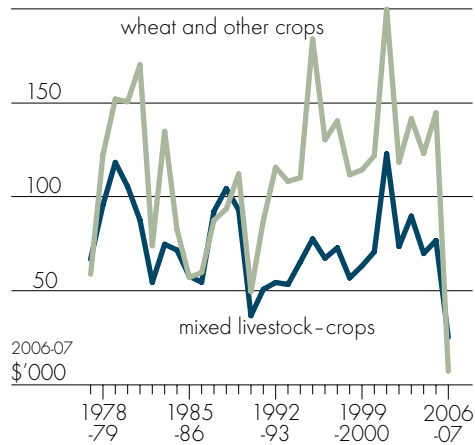
The average farm cash income for dairy farmers in Victoria, New South Wales and South Australia is projected to fall considerably in 2006-07, with receipts barely sufficient to cover cash costs (table 3). The higher cost of fodder, caused by reduced pasture availability and much higher fodder prices, was a major factor affecting the financial performance of farms in these states. This was further compounded by lower milk production and sales.

### performance, by industry

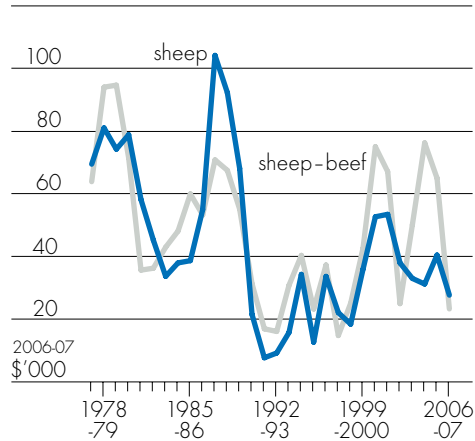
Summary information on financial performance in Australian broadacre and dairy industries is given in table 4 and figures B and C, while detailed estimates are provided in table 5. For the purposes of survey design, analysis and data presentation ABARE uses the Australian and New Zealand Standard Industrial Classifica-

## B farm cash income

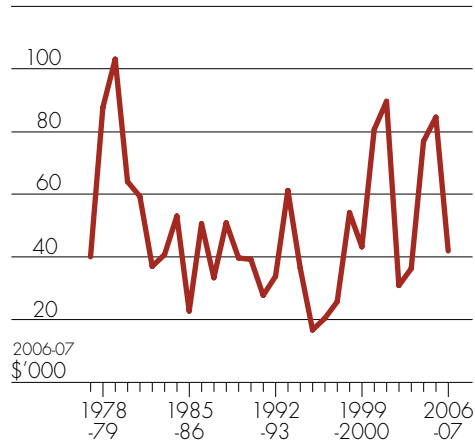
### grains



### sheep



### beef



## farm performance

tion of industry type or ANZSIC. Many Australian broadacre farms are mixed enterprises combining grain growing, sheep or beef cattle. The following discussion of grains, sheep, beef and dairy farms uses information for broadacre ANZSIC industry types substantially involved in the production of these commodities.

### grain farms

Farm cash income for grain producers in the wheat and other crops and mixed livestock-crops industry increased modestly in 2005-06 to where it could be considered to be among the better income years in the past three decades. Substantial increases in grain production bolstered receipts even though grain prices were slightly lower. Receipts on mixed livestock-crops farms were also boosted by higher receipts from beef cattle and lambs. Farm costs rose because of the higher costs associated with the production, harvest and marketing of the large 2005 winter crop. Farm expenditures on fuel, fertiliser, and grain handling were all higher. Average interest payments also rose as many grain farms increased borrowings to finance new investments in plant and machinery.

## 4 financial performance of broadacre farms, by industry

average per farm

	farm cash income			farm business profit		
	2004-05	2005-06 <sup>p</sup>	2006-07 <sup>s</sup>	2004-05	2005-06 <sup>p</sup>	2006-07 <sup>s</sup>
	\$	\$	\$	\$	\$	\$
wheat and other crops	115 860	140 560	7 100	22 710	54 980	-112 300
mixed livestock-crops	66 750	74 490	25 200	-7 700	-200	-62 500
beef industry	72 740	82 100	41 900	20 490	8 400	-40 500
- farms with less than 300 beef cattle	29 943	21 518	12 192	-38 046	-34 439	-45 896
- farms with more than 300 beef cattle	92 437	115 194	57 784	47 551	31 756	-37 535
sheep	29 370	39 390	27 800	-26 570	-17 340	-50 100
- farms with less than 3000 sheep	9 917	24 615	15 248	-46 536	-23 420	-53 684
- farms with more than 3000 sheep	63 771	62 726	47 531	9 448	-7 737	-44 339
sheep-beef	72 070	63 240	23 400	1 370	-6 830	-29 400
all broadacre industries	72 790	81 290	26 600	3 690	8 620	-59 800
dairy	17 840	86 030	17 800	19 970	19 260	-79 500
	rate of return - excluding capital appreciation <sup>a</sup>			rate of return - including capital appreciation <sup>a</sup>		
	2004-05	2005-06 <sup>p</sup>	2006-07 <sup>s</sup>	2004-05	2005-06 <sup>p</sup>	
	%	%	%	%	%	%
wheat and other crops	2.2	3.2	-1.4	8.0	5.5	
mixed livestock-crops	0.8	1.0	-0.9	7.0	5.4	
beef industry	1.3	1.0	-0.2	9.7	10.8	
- farms with less than 300 beef cattle	-2.2	-1.4	-1.9	10.5	10.9	
- farms with more than 300 beef cattle	1.9	1.5	0.2	9.6	10.8	
sheep	-0.3	0.4	-1.0	6.8	4.8	
- farms with less than 3000 sheep	-2.2	-0.4	-2.1	7.4	4.2	
- farms with more than 3000 sheep	1.2	0.9	-0.2	6.4	5.2	
sheep-beef	0.7	0.5	0.0	5.1	7.6	
all broadacre industries	1.1	1.3	-0.6	7.8	7.3	
dairy	2.5	2.3	-1.3	8.6	7.0	

<sup>a</sup> Defined as profit at full equity, including or excluding capital appreciation, as a percentage of total opening capital. Profit at full equity is defined as farm business profit plus rent, interest and lease payments less depreciation on leased items. <sup>p</sup> Preliminary. <sup>s</sup> Provisional estimate.

## 5 financial performance, by industry

average per farm

	wheat and other crop industry			mixed livestock-crops industry		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 492 513	576 937 (8)	399 586	323 515	334 322 (7)	258 409
total cash costs	\$ 376 657	436 373 (7)	392 486	256 761	259 832 (6)	233 229
<b>farm cash income</b>	\$ 115 856	140 563 (15)	7 100	66 754	74 490 (16)	25 180
farms with negative farm cash income	% 27	19 (16)	52	25	18 (14)	54
<b>farm business profit</b>	\$ 22 707	54 979 (31)	-112 349	-7 696	-201 (124)	-62 454
farms with negative farm business profit	% 59	41 (11)	77	60	61 (6)	77
profit at full equity						
- excl. capital appreciation	\$ 67 093	108 429 (17)	-50 191	21 726	30 208 (44)	-26 562
- incl. capital appreciation	\$ 243 069	185 854 (14)	na	180 459	156 080 (16)	na
farm capital at 30 June <b>a</b>	\$ 3 300 532	3 561 133 (6)	na	2 767 794	3 041 243 (6)	na
net capital additions	\$ 73 870	89 376 (24)	na	36 404	24 374 (57)	na
farm debt at 30 June <b>b</b>	\$ 491 716	575 208 (9)	666 060	333 271	350 924 (12)	402 858
equity at 30 June <b>b c</b>	\$ 2 634 236	2 960 258 (6)	na	2 394 395	2 673 530 (6)	na
equity ratio <b>b d</b>	% 84	84 (1)	na	88	88 (1)	na
harvest loans at 30 June <b>e</b>	\$ 41 168	44 904 (15)	na	8 334	12 453 (24)	na
farm liquid assets at 30 June <b>b</b>	\$ 167 859	172 125 (11)	na	106 397	111 528 (10)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 46 665	39 206 (15)	na	21 887	20 807 (14)	na
share of farms with FMDs at 30 June <b>b</b>	% 30	25 (13)	na	24	21 (13)	na
rate of return <b>f</b>						
- excl. capital appreciation	% 2.2	3.2 (14)	-1.4	0.8	1.0 (42)	-0.9
- incl. capital appreciation	% 8.0	5.5 (11)	na	7.0	5.4 (14)	na
off-farm income of owner-manager and spouse <b>b</b>	\$ 23 892	28 030 (11)	na	27 307	32 555 (13)	na
	sheep industry			beef industry		
	2004-05	2005-06 p	2006-07 s	2004-05	2005-06 p	2006-07 s
total cash receipts	\$ 200 769	228 016 (7)	194 442	500 255	347 428 (40)	322 394
total cash costs	\$ 171 396	188 627 (7)	166 673	427 513	265 323 (41)	280 542
<b>farm cash income</b>	\$ 29 373	39 390 (19)	27 769	72 741	82 104 (39)	41 852
farms with negative farm cash income	% 37	29 (17)	30	25	27 (15)	39
<b>farm business profit</b>	\$ -26 565	-17 340 (47)	-50 059	20 486	8 401 (139)	-40 457
farms with negative farm business profit	% 72	63 (8)	78	57	61 (8)	74
profit at full equity						
- excl. capital appreciation	\$ -6 804	8 962 (79)	-25 722	44 660	37 511 (65)	-6 572
- incl. capital appreciation	\$ 155 233	121 667 (19)	na	324 742	390 902 (14)	na
farm capital at 30 June <b>a</b>	\$ 2 417 288	2 633 441 (6)	na	3 687 655	3 994 994 (5)	na
net capital additions	\$ -3 715	-12 830 (353)	na	59 523	30 997 (131)	na
farm debt at 30 June <b>b</b>	\$ 200 743	259 224 (15)	257 029	285 711	308 059 (12)	369 775
equity at 30 June <b>b c</b>	\$ 2 138 887	2 367 642 (5)	na	3 245 099	3 675 218 (5)	na
equity ratio <b>b d</b>	% 91	90 (1)	na	92	92 (1)	na
harvest loans at 30 June <b>e</b>	\$ 594	819 (69)	na	102	262 (85)	na
farm liquid assets at 30 June <b>b</b>	\$ 96 517	101 764 (15)	na	124 293	159 968 (12)	na
farm management deposits (FMDs)						
at 30 June <b>b</b>	\$ 20 083	14 556 (19)	na	24 148	15 930 (16)	na
share of farms with FMDs at 30 June <b>b</b>	% 25	17 (17)	na	21	16 (15)	na
rate of return <b>f</b>						
- excl. capital appreciation	% -0.3	0.4 (79)	-1.0	1.3	1.0 (62)	-0.2
- incl. capital appreciation	% 6.8	4.8 (21)	na	9.7	10.8 (13)	na
off-farm income of owner-manager and spouse <b>b</b>	\$ 28 661	29 963 (15)	na	29 877	34 384 (35)	na

## farm performance

The effect on financial performance of the widespread crop failures in 2006-07 has been concentrated on grain farms, particularly cropping specialists. Farm cash income is expected to drop sharply for grain producers, with reductions in crop receipts the major cause. Two factors served to limit the reduction in receipts. First, grain prices have risen sharply from the previous year, providing a healthy return for what little grain was harvested. Second, there were substantial payments for the previous year's large crop that were received in 2006-07. The reduction in farm receipts is projected to be amplified on mixed livestock-crops farms by lower lamb and beef prices, and by the sale of less than finished stock due to drought conditions.

With average cash costs only projected to be around 10 per cent lower than in the previous year, the average farm cash income for both wheat and other crops and mixed livestock-crops industry farms are projected to fall to the lowest level in the past three decades (figure B). Farm business profits are also projected to be drastically reduced. The reduction in profit is projected to be greater than the reduction in farm cash income mostly because of a reduction in on-farm inventories of grain and livestock. Just over 50 per cent of grains farms are projected to record negative farm cash incomes in 2006-07 and average farm debt is expected to increase by around 15 per cent. Almost all of the increase in debt in 2006-07 is expected to be for working capital.

On the positive side, one of the major reasons for the low farm cash income is the relatively high level of farm expenditure anticipated for the planting of the forthcoming 2007

## 5 financial performance, by industry

average per farm

	sheep-beef industry			dairy industry		
	2004-05	2005-06 <sup>p</sup>	2006-07 <sup>s</sup>	2004-05	2005-06 <sup>p</sup>	2006-07 <sup>s</sup>
total cash receipts	\$ 301 038	289 527	(32) 245 265	355 390	416 268	(3) 377 798
total cash costs	\$ 228 969	226 286	(26) 221 896	275 002	330 236	(4) 359 957
farm cash income	\$ 72 069	63 241	(61) 23 369	80 388	86 032	(9) 17 840
farms with negative farm cash income	% 26	21	(22) 47	6	15	(21) 46
farm business profit	\$ 1 369	-6 825	(384) -29 368	19 967	19 259	(39) -79 476
farms with negative farm business profit	% 56	64	(8) 79	43	48	(12) 78
profit at full equity						
- excl. capital appreciation	\$ 22 174	17 183	(154) 1 545	53 213	60 748	(13) -36 695
- incl. capital appreciation	\$ 167 743	281 876	(55) na	185 222	185 221	(35) na
farm capital at 30 June <sup>a</sup>	\$ 3 478 213	3 957 508	(23) na	2 321 718	2 830 275	(4) na
net capital additions	\$ 72 327	-3 790	(3757) na	30 693	47 990	(28) na
farm debt at 30 June <sup>b</sup>	\$ 247 768	285 620	(14) 369 539	334 588	439 016	(8) 491 014
equity at 30 June <sup>b c</sup>	\$ 3 070 306	3 663 476	(25) na	1 961 237	2 382 744	(4) na
equity ratio <sup>b d</sup>	% 93	93	(2) na	85	84	(1) na
harvest loans at 30 June <sup>e</sup>	\$ 97	0	(0) na	0	0	(0) na
farm liquid assets at 30 June <sup>b</sup>	\$ 106 251	116 923	(18) na	77 517	78 467	(15) na
farm management deposits (FMDs) at 30 June <sup>b</sup>	\$ 19 273	15 237	(43) na	10 125	11 739	(20) na
share of farms with FMDs at 30 June <sup>b</sup>	% 22	19	(14) na	17	14	(22) na
rate of return <sup>f</sup>						
- excl. capital appreciation	% 0.7	0.5	(140) 0.0	2.5	2.3	(13) -1.3
- incl. capital appreciation	% 5.1	7.6	(42) na	8.6	7.0	(36) na
off-farm income of owner-manager and spouse <sup>b</sup>	\$ 28 729	27 936	(13) na	22 903	19 345	(16) na

<sup>a</sup> Excludes leased plant and equipment. <sup>b</sup> Average per responding farm. <sup>c</sup> Farm capital minus farm debt. <sup>d</sup> Equity expressed as a percentage of farm capital. <sup>e</sup> Harvest loans are not included in farm debt. <sup>f</sup> Rate of return to farm capital at 1 July. <sup>p</sup> Preliminary estimates. <sup>s</sup> Provisional estimates. <sup>na</sup> Not available.

winter crop. Projected total cash costs for 2006-07 include a large part of the anticipated cost of planting the next crop and producers have indicated that they intend to significantly expand winter crop area in 2007 if autumn rainfall is favourable. Further, the high level of new investment on grain farms in recent years in new plant and machinery should assist grain farm to increase output and productivity when seasonal conditions improve.

### sheep farms

In 2005-06, sheep industry farm cash incomes increased by 20 per cent on the back of higher receipts from crops and, to a lesser extent, lambs and sheep. This result was achieved despite a reduction in wool production and wool prices. Farm cash income for sheep-beef industry farms in 2005-06 was slightly lower than the previous year as higher beef receipts offset reductions in income from sales of sheep, lambs, wool and crops. However, farm cash income above \$60 000 is historically high when compared with incomes since the beginning of the 1990s.

In 2006-07, farm cash income is projected to fall sharply for sheep-beef industry farms as prices for wool, sheep, lambs and beef cattle are all forecast to weaken. Fodder costs for these farms are also expected to rise significantly. For sheep-beef industry farms, particularly in northern New South Wales and larger pastoral properties in Queensland and Western Australia, average turnoff of sheep and cattle is expected to be lower in 2006-07. This will also act to reduce farm receipts from the previous year's level but lead to a lesser reduction in farm business profit as livestock numbers increase slightly after several years of high turnoff.

The fall in average farm cash income on sheep industry farms in 2006-07 is projected to be smaller than for the sheep-beef industry. Turnoff of sheep is expected to be up as producers reduce stock numbers in the light of reduced pasture availability. However, with lower sheep and lamb prices and the poorer average condition of stock, sheep receipts are nonetheless expected to fall. Receipts from wool are expected to be slightly down on the previous year with higher prices only partly offsetting lower production. A substantial increase in the average expenditure on fodder is projected to limit the extent to which sheep producers reduce cash costs.

### beef farms

Average beef cattle turnoff fell slightly on beef industry farms in 2005-06, although the reduction in turnoff was more marked in pastoral Queensland where herds were being rebuilt. The reduction in cattle turnoff on beef industry farms was a major factor that reduced their total cash receipts in 2005-06 along with lower average crop receipts. However, total farm cash costs also fell significantly in 2005-06 because of a large reduction in purchases of store and breeding stock and reduced fodder expenditure. This more than offset the reduction in receipts and farm cash incomes rose slightly to average \$82 000 per farm. In real terms, this was similar to the other historical highs observed in 1979-80 and more recently in 2001-02 (figure B). Farm business profit was also above average in 2005-06.

In 2006-07, net sales of beef cattle are expected to rise in all states other than Queensland and the Northern Territory. This mostly reflects the extremely dry conditions in southern Australia that have restricted pasture availability. However, in northern Australia, seasonal conditions are relatively much better and producers are intending to continue herd rebuilding by limiting the number of cattle sold. Overall, beef cattle sales by beef industry specialists are projected to be slightly higher in 2006-07 than in the previous

## farm performance

year, although slightly lower prices are expected to lead to lower beef cattle receipts. While receipts are projected to be around 10 per cent lower in 2006-07, farm cash costs are projected to rise slightly above the previous year's level. Cattle purchases are expected to fall further as producers either endeavour to rebuild herds through natural increase or limit purchases to manage the reduced feed availability depending on their local seasonal conditions. However, the lower cost of livestock purchases is expected to be almost entirely offset by higher fodder costs. Lower receipts and unchanged cash costs are projected to result in average farm cash incomes in the beef industry roughly halving to just above \$40 000 per farm in 2006-07.

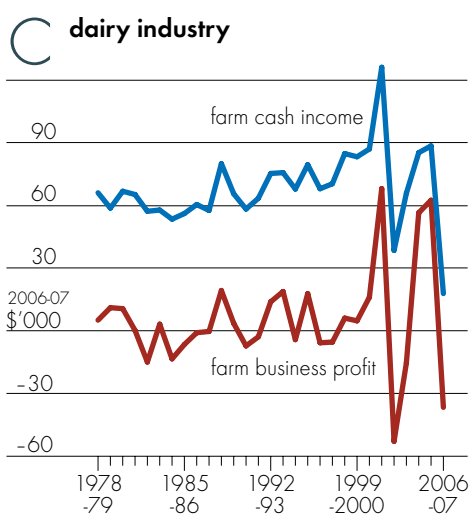
### dairy industry

The Australian dairy industry has undergone a number of large production and market related shocks in recent years. These include severe drought, low allocations of irrigation water in the Goulburn and Murray Valley production regions and highly volatile world market returns between 2001 and 2003. These shocks have had a major influence on farm production and financial performance in the four years to 2005-06. Average farm cash incomes in the dairy industry recovered in both 2003-04 and 2004-05 from the low recorded in the drought affected year of 2002-03. In 2004-05 in particular, higher production and higher prices contributed to a marked improvement in the average financial performance of Australian dairy farms.

The same factors further boosted average farm cash income in 2005-06. The higher production was particularly notable in that it was achieved despite a deterioration of seasonal conditions in the second half of the year. The strong increase in receipts was more than sufficient to offset the higher cost of fertiliser, fodder and interest payments in 2005-06 and average farm cash income rose to around \$86 000 per farm, which over the past three decades was second only in real terms to the record incomes in 2001-02 (figure C).

In 2006-07, many dairying regions have been significantly affected by drought and significantly lower availability of irrigation water. This has resulted in reduced pasture production and has driven fodder costs higher. Dairy farm expenditure on fodder is projected to average more than \$130 000 per farm in 2006-07, which is around 25 per cent higher in real terms than in 2002-03 when drought conditions were also severe. Anticipation of continued drought conditions has led many dairy farms to dry off cows early and reduce herd numbers to contain farm costs.

Reductions in average milk production of around 10 per cent in combination with slightly lower milk prices are projected to result in a sharp decline in dairy farm receipts in 2006-07. With lower farm receipts and higher cash costs, farm cash incomes are projected to fall markedly to below \$18 000 per farm. The reduction in dairy herd numbers and the rundown in on-farm stocks of fodder and grain are projected to lead to farm business profit falling by even more than farm cash income.



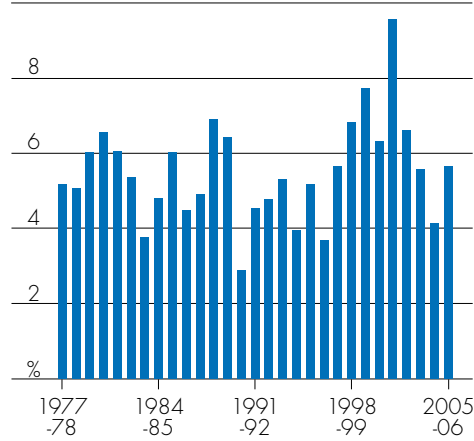
recent trends in farm business debt

**financing farm expansion and capital investment**

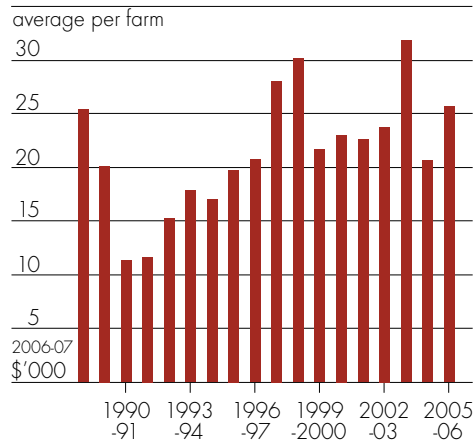
From the mid-1990s up to 2001-02 there was a steady increase in the proportion of farms acquiring land and expanding the scale of their farm operation (figure D). Increasing the scale of operation is an important means of boosting farm productivity as the more efficient methods of farming often need to be adopted on a large scale in order to capture their advantages. The rising proportion of farms purchasing additional land was accompanied by a steady increase in average farm debt until the end of the 1990s, although two years of above average incomes in 2000-01 and 2001-02 served to temper this increase.

While the proportion of farms acquiring land has fallen from 2002-03 onwards, the average value of net additions of plant, machinery, vehicles and improvements has remained relatively high (figure E) and average farm debt has continued to rise. Instead of seeking to expand farm income by increasing the physical size of their properties in the face of high land prices, many producers have switched to the strategy of investing in new plant, equipment and farm improvements in order to improve the productivity of their farms. Where this investment has been well targeted, increases in farm productivity can be expected over the coming years, strengthening future farm financial performance. Although there was an increase in working capital debt as farms dealt with the drought of 2002-03, the great majority of the

**D** proportion of broadacre farms expanding



**E** investment in plant, machinery, vehicles and improvements



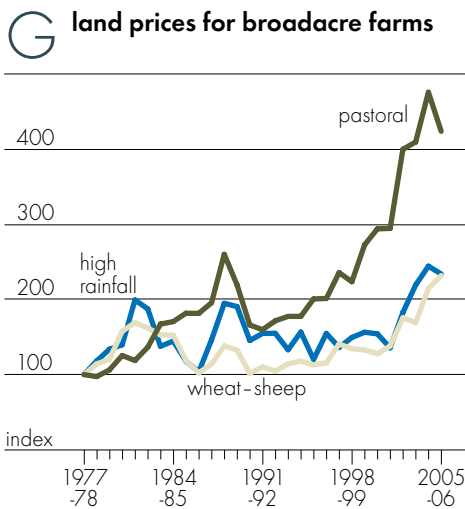
**F** farm debt



**farm business debt**

Farm business debt estimates have been provided exclusive of debt that is underwritten, including harvest loan and dairy structural adjustment advances. Inclusion of harvest loans in estimates of farm business debt can result in falls in farm debt for grain producing farms in drought years as crop production is reduced, masking the increases in working capital debt that often occurs at these times. Conversely, debt increases in years of high crop production when cash flow is also high. Harvest loans and dairy structural adjustment payments are reported separately in the tables.

## farm performance

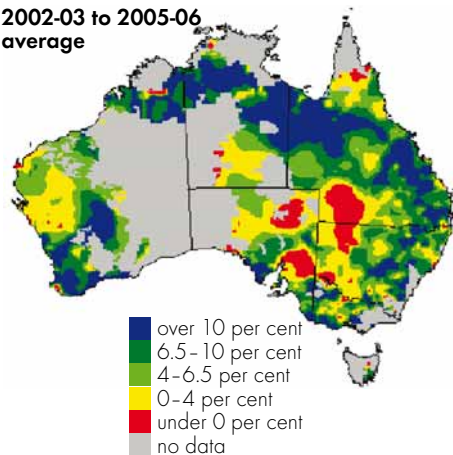


increase in farm debt in recent years has been used to fund new farm investment (figure F).

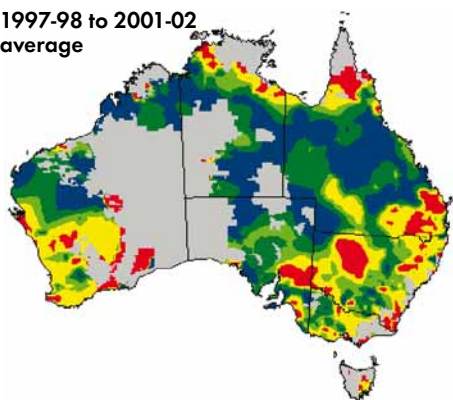
Although average farm debt has increased steadily in real terms since the mid-1990s, broad-acre farmers have been able to maintain their equity in the farm business at close to 90 per cent due to a strong rise in land values driven by steadily increasing demand for agricultural land (figure G). Rising land values in recent years have not only supported equity levels, but have also led to very high average rates of return to total farm capital including capital appreciation in most farming regions (map 2). This has been especially noticeable since 2002-03 when the increases in land values in the southern high rainfall and wheat-sheep zones have been substantial.

## 2 average annual rates of return including capital appreciation

2002-03 to 2005-06 average



1997-98 to 2001-02 average



### impact of drought in 2006-07

With a large projected increase in the proportion of farm businesses recording negative farm cash income in 2006-07, many farms may need to increase borrowing for working capital, particularly those where reserves of liquid assets are low. It would be expected that there will be far less debt-financed investment in land and nonland capital as most farmers will be looking to defer these types of investments until incomes improve. There are also some early signs that farms are choosing to meet their short term funding needs by accessing their accumulated portfolio of liquid assets including 'farm management deposits'. In the September quarter of 2006 the net withdrawal from farm management deposit accounts was more than \$500 million (figure H).

Although average farm debt for broadacre farms is projected to increase by 16 per cent to more than \$410 000 per farm, average equity ratios are expected to remain relatively high provided land values at least remain steady. Assuming land values remain unchanged during 2006-07, on the basis of projected increases in farm debt the average farm equity ratio for broadacre farms would fall by two percentage points to 88 per cent by 30 June 2007. Naturally there is considerable variation around this average as individual farm businesses are at different stages of farm development, requiring them to carry very different levels of debt, and each will adopt their own strategy to finance farm expansion and capital investment. For example, while the average

equity ratio among broadacre farms was around 90 per cent at the end of 2005-06, around 7.4 per cent of broadacre farms were estimated to have an equity ratio of less than 70 per cent. However, low equity ratios are not necessarily an indication of an unviable farm. A low equity ratio can be manageable if that farm generates enough income to service debt and meet other financial obligations.

In order to better understand the impact of the 2006-07 drought on debt servicing capacity, a classification based on the combination of equity and cash flow has been developed. Farms are separated into one of four groups according to whether their equity ratio is above or below 70 per cent, and their farm cash income is positive or negative. The results are presented in figure I. Estimates for 2006-07 use expected farm debt at 30 June 2007 as provided by farm operators in interviews in January 2007 and an assumption that total capital value at 30 June 2007 remains unchanged from 30 June 2006.

Figure I shows that the average equity position of Australian broadacre farms as they entered the drought was good. In the period 2003-04 to 2005-06, the proportion of farms with equity ratios above 70 per cent (the sum of the two bottom bars) rose to its highest level in the past three decades. However, the deleterious effect of drought on farm incomes in 2006-07 is also clear. The proportion of farms with negative cash income increased from 21 per cent in 2005-06 to 42 per cent in 2006-07. This is a much larger increase in the size of this group of farms compared with the previous drought in 2002-03, when the proportion of broadacre farms with negative farm cash income increased from 17 per cent to 33 per cent.

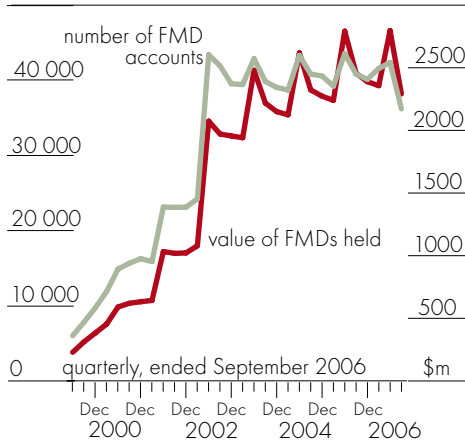
Within the group of farms with negative income, it is those farms with the lowest level of equity that may have the greatest difficulty obtaining additional credit in the future. The proportion of farms with negative farm cash incomes and equity of less than 70 per cent is projected to more than double, rising to 6.5 per cent by the end of 2006-07. The last time that this many farms had negative income and very low equity levels was in the early 1990s.

While financial factors such as debt servicing ability are obviously important to a farm's ability to manage the impact of the current drought, there is an array of other financial and nonfinancial factors that are also important. These are considered in more detail in the following section.

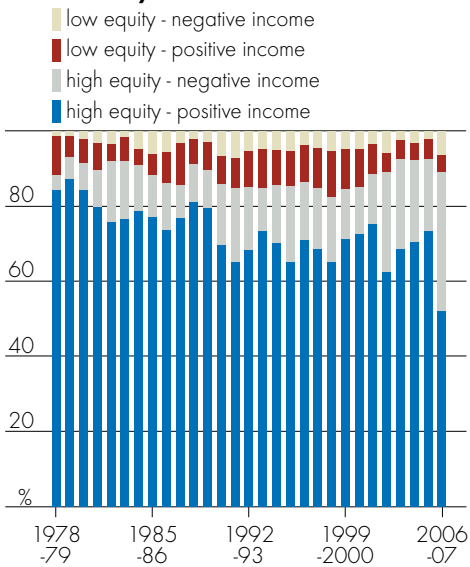
### adaptive capacity of broadacre farms

While financial factors such as debt servicing ability are obviously important to a farm's ability to manage the impact of the current drought, there is an array of

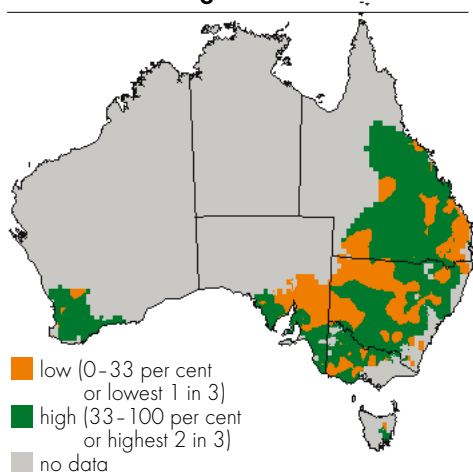
### H farm management deposits and number of account holders



### distribution of farms, by equity ratio and farm cash income – broadacre and dairy farms



### 3 adaptive capacity of Australian farm households reliant on broadacre agriculture



other financial and nonfinancial factors that are also important. Nelson et al. (2005) used the rural livelihood framework of Ellis (2000) to create a simple and low cost indicator of the vulnerability of Australian farm households dependent on broadacre agriculture. ABARE and CSIRO are currently improving this analysis for the National Land and Water Resources Audit, and preliminary results are shown in map 3.

The analysis presented in map 3 differs from that of Nelson et al. (2005) in that it focuses on adaptive capacity rather than the broader concept of vulnerability (see the box section below). An advantage of focusing on the adaptive capacity of farm households is that it can be positively influenced by policy. The adaptive capacity of farm households can be enhanced through policies that increase the diversity of assets and activities available to form livelihood strategies (Ellis 2000). Policies of this kind include investment in production, transport and marketing

infrastructure, education and training, regional development, and policies that affect the cost and availability of rural credit (Anderson 2003).

#### adaptive capacity of broadacre farm households

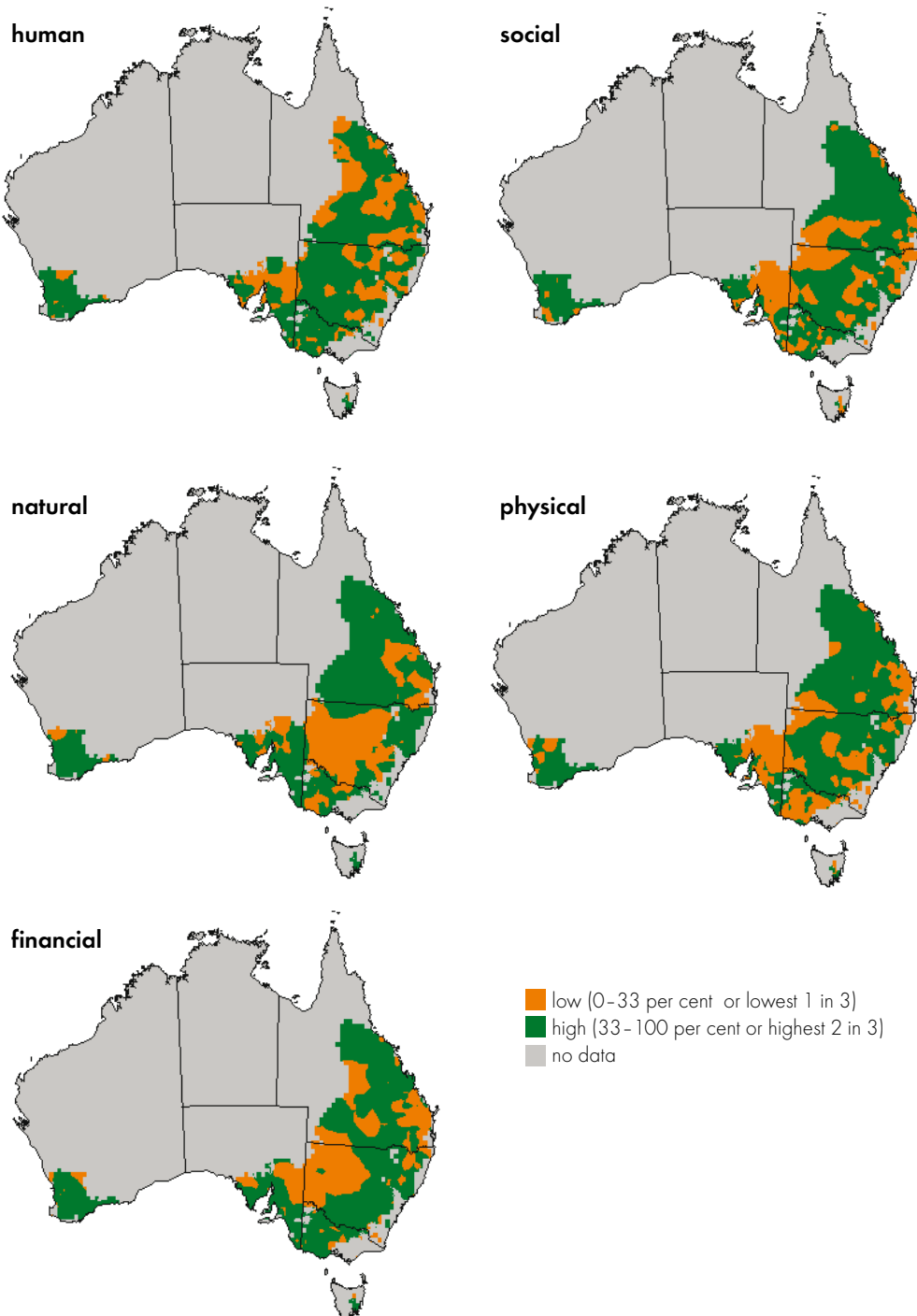
The adaptive capacity of Australian farm households to external drivers of change, such as climate and declining terms of trade, depends partly on the diversity of assets and activities that they can draw on to form livelihood strategies (Ellis 2000). Adaptive capacity contributes to the more dynamic concept of resilience, defined as the ability of farm households to recover their livelihoods following stress or shocks (Ellis 2000; Walker and Salt 2006). Greater diversity enables substitution between activities and assets to adapt to external change, particularly if income sources less affected by any particular driver of change are available. Assets and activities are defined broadly within rural livelihoods analysis to reflect the important contributions that human, social and natural capital make to productivity along with the commonly recognised physical and financial assets.

Most of the data for this analysis are drawn from data provided by Australian farmers through ABARE broadacre surveys. For this analysis:

- » a human capital index was created from operator and spouse education levels, combined with a measure of self assessed health status (ABS 2006)
- » social capital is reflected in partnerships within the farm business, combined with internet use and membership of Landcare as measures of external social capital
- » natural capital uses the pasture growth index from the AussieGrass model (Carter et al. 2000) as a measure of biophysical productivity; in addition, data on threats to biophysical productivity arising from weeds and salinity have been incorporated using data from the National Land and Water Resources Audit
- » physical capital is measured using information on plant and machinery, on-farm structures and livestock
- » financial capital is represented using average farm incomes, diversity of on- and off-farm incomes sources, and business finance.

Estimates for each of the components are presented in the maps on the opposite page.

components of the adaptive capacity index



## farm performance

Concentrations of broadacre farm households with relatively low adaptive capacity are highlighted by the orange areas of map 3. The factors contributing to low values of the adaptive capacity index vary across agricultural regions. For the extensive (mainly sheep) grazing regions of central eastern South Australia, and far western New South Wales, low adaptive capacity results from the intrinsically low levels of physical and natural capital combined with low levels of social capital.

In the opportunistic cropping areas in central New South Wales, low levels of financial capital are the result of farms being too small to cope with declining terms of trade. In some areas, the incursion of woody weeds and constraints on land clearing contribute to diminishing natural capital inland of the eastern Australian grain belt. In addition, there are pockets of low human and social capital as in other cropping areas of New South Wales.

Low adaptive capacity in south east Queensland is caused by low ratings on all forms of capital. Structural adjustment pressures caused largely by small farm size are reflected in low measures of financial and physical capital. The low natural capital index for this region reflects a latent and largely as yet unexpressed salinity hazard that is the only potential threat to the otherwise high levels of natural capital.

Farm size also reduces the adaptive capacity in many regions of Victoria. Overall adaptive capacity is low in south western Victoria where low physical capital coincides with low natural and social capital.

It is also worth drawing attention to the reasons why some regions return relatively high values for the adaptive capacity index in the face of obvious pressures. For example, salinity is a significant threat to the natural capital of agricultural industries in Western Australia. However, this is compensated by high levels of biophysical productivity and more manageable weed issues than some of the agricultural regions of eastern Australia. In addition, relatively high levels of human, social, physical and financial capital contribute to high adaptive capacity. Similarly, low human capital and a lack of income diversity in the cattle grazing regions of northern Queensland is offset in terms of overall adaptive capacity by more adequate levels of social, physical and natural capital.

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